

marine chronometers, and one of his latest and best works was the great clock recently erected at Gloucester Cathedral. He took a special pride in the going of "Big Ben" at the Houses of Parliament, Westminster, which was made by his firm, and in 1887 drew the attention of the Society to the fact that the clock had gone from March 29 to July 6 without any alteration, remaining within 2 sec. of true Greenwich time. From the purely astronomical point of view perhaps his best work was the construction of the Sidereal Standard Clock at Greenwich, in 1871. The clock was to have Airy's escapement (described in Vol. III. of the *Trans. Camb. Phil. Soc.*), and the more delicate parts of this escapement Mr. Buckney made with his own hands. But Airy had ordered a heavy mercurial pendulum, and Mr. Buckney convinced himself from experiments made at the time that a zinc and steel pendulum was preferable, as it would respond to changes of temperature much more readily. The mercury compensation had a sluggish action "due to the more slender parts of the pendulum (the rods and spring) taking up the new temperature very quickly, whilst the bobs, being much more bulky, required a much longer time to do this. . . . Considering the matter, it occurred to me that if we were to eliminate from the compensative action of the zinc and steel pendulums the expansion of the bob, which we could easily do by suspending it at its centre of gravity, and rely entirely on the zinc and steel tubes and rod, matters would be very much improved, as then the compensation would be effected by parts having pretty much the same bulk, and therefore likely to act simultaneously. And so it turned out. . . . In the end I determined to lay the matter before Sir George Airy, and request his sanction to the removal of the mercurial pendulum from the Greenwich clock, and the substitution in its place of a zinc and steel pendulum on the new principle." (*Monthly Notices, R.A.S.*, xlv., pp. 464-65). That the clock has been a success a glance at any of the subsequent Greenwich volumes will show. In 1880 Mr. Buckney read a paper to this Society suggesting a method of enclosing a clock in an air-tight case, winding it electrically by currents set up by itself. He was a constant attendant at the meetings of the Society (of which he was elected Fellow in May 1880) until recent years. Those who attend the meetings have become accustomed to glance at their watches when the bell rings, knowing that the signal represents accurate Greenwich time. They are indebted for the introduction of this signal to the kindness of Mr. Buckney, who arranged that hourly signals should be sent from Messrs. Dent's to the Society's rooms free of charge; the Society only repaying the rental of the wire charged by the Post Office. His death took place at his residence in London after a short illness on the 1st of February 1900, at the age of sixty-one.

SOMERSET HENRY MAXWELL, 10th Baron FARNHAM, representative Peer of Ireland, J.P., D.L. county Cavan, Lieutenant

P 2

88th Regiment (retired), of Farnham, county Cavan, Ireland, died the 22nd of November 1900.

Baron Farnham, son of Richard Thomas Maxwell, son of 6th Baron Farnham and of Charlotte, daughter of Rev. Henry P. Elrington, D.D., Precentor of Ferns, was born the 7th of March 1849, at Newtonbarry, county Wexford, was educated at Harrow, and married Florence Jane, seventh daughter of the 3rd Marquess of Headfort. He had four sons and two daughters. The eldest son having died from the result of an accident immediately after his coming of age, he is succeeded in the title by his second son, the Hon. Arthur Kenlis, born on the 2nd of October, 1879.

As Major Somerset Henry Maxwell his name will be remembered in connection with the land troubles in Ireland in 1881, as he took a prominent part in the resistance made by the landlords against the encroachments of the Land League, and led the expedition fitted out to help Captain Boycott and others on this occasion.

He devoted himself largely to scientific pursuits, more especially to microscopy and astronomy, and had a small but very complete observatory, containing a Grubb 6-inch equatorial and accessories, fitted up at Arley Cottage, on the banks of Lough Sheelan, where he resided until he succeeded to the title in 1896.

In order to ensure the best observing conditions, his observatory was established at some little distance from the dwelling-house, but no considerations of inconvenience or fatigue deterred him from the systematic pursuit of his astronomical labours. He collected a considerable number of double-star measures, and calculated out the orbits himself.

He was anxious to help fellow-workers, and will long and gratefully be remembered by many in the north of Ireland for the prominent part he took in the organising and carrying on of the Ulster Astronomical Society, established in 1890. He was Vice-President of this Society (the President being the Rev. Dr. Hamilton, President of Queen's College, Belfast). He delivered many valuable lectures in connection with this Society.

Later on, other pressing duties having prevented him from devoting so much of his time to this work, the Society was amalgamated with the Belfast Society for the Extension of University Teaching, but there is no doubt that much of the interest in astronomical matters existing at present in Ulster is due to his personal efforts to bring the subject before the public in an attractive and interesting form.

By his will he leaves his natural history collection in trust to the Hon. Judge Boyd and Sir Howard Grubb, F.R.S., and his astronomical observatory to Sir Howard Grubb, F.R.S., and Mr. W. E. Wilson, F.R.S., to be dealt with at their discretion for the benefit of science.

Lord Farnham was elected a Fellow of the Royal Astronomical Society on the 9th of December 1887, and contributed

a short note to the *Monthly Notices* in 1889 (vol. l. p. 34) on "Observations of the Conjunction of *Mars* and *Saturn*."

JAMES GILL was born on the 14th of May 1840, near Port St. Mary, Isle of Man, and though early attracted to the sea and bearing for many years the courtesy title of 'Captain,' he chose rather to train others in navigation and seamanship than to seek a command for himself. To the Mercantile Marine in Liverpool he rendered a very important service by the careful training and instruction he gave to many officers. For many years he was the Principal of the Navigation School at the Sailors' Home, and occupied such a commanding position as a teacher that when the Liverpool Corporation decided to found a school of Nautical Astronomy under their own supervision Mr. Gill was elected to the Head Mastership. In September 1892 the Nautical College was opened with the intention of providing a more thorough and efficient course of instruction than was demanded by the Board of Trade certificates. Mr. Gill loyally recognised the views and intentions of the Corporation, and for eight years he struggled not unsuccessfully against the superficial methods of tuition which had too long obtained in nautical circles. With the view of promoting a sounder study of navigation he published *A Text-Book of Navigation and Nautical Astronomy* (Longmans, 1898), which has attained considerable success.

Mr. Gill was elected a Fellow of this Society in January, 1888, but from a much earlier date he had given assistance to the Liverpool Astronomical Society, and in later times the meetings of this Society were held in apartments in the Nautical College. For some time he was President, and by his influence contributed not a little in keeping this Society together. He died on the 9th of January 1900, leaving a widow and three children.

EDWARD JOSEPH LOWE was the only surviving son of the late Mr. Alfred Lowe, of Highfield House, Nottingham, where he was born on the 11th of November 1825. At the age of fifteen he began an important series of meteorological observations, which were continued down to the time of his removal (in 1882) to Chepstow, Monmouthshire. He published in 1846 "A Treatise on Atmospheric Phenomena," and two years later began to assist the late Professor Baden-Powell, of Oxford, in his work on luminous meteors, and the results of their observations, which extended over a number of years, were communicated to the British Association. Mr. Lowe was elected a Fellow of this Society on the 14th of January 1848, and read his first paper in April 1849, on "Observations of Solar Spots at Mr. Lawson's Observatory, Bath," in which some curious phenomena are described. "The *umbra*, which was of an elongated form, opened in the centre, and so divided it into two parts; it always opened from the lower edge, and was alternately open and closed at intervals of 15^s; this was very sensible, and the experiment